## REMARKS

### RESTRICTION REQUIREMENT

Applicant confirms the election of Group II (claims 59-63) made by telephone on April 19, 2006. The election is made without traverse. Accordingly, Applicant cancels claims 1-58.

### INFORMATION DISCLOSURE STATEMENT

The IDS filed on February 4, 2004 was filed in an earlier application that was properly identified in the IDS and that was relied on for an earlier effective filing date under 35 USC 120. Accordingly, under Rule 1.98(d), it is not necessary to submit copies of the references.

### SECTION 102 REJECTION OF CLAIM 59

*Hochman*[1] may have drawn the Examiner's attention because of the numerous gray scale images of biological materials contained in the figures. These may have suggested, to the Examiner, the "continuous grade output" recited in the claim.

However, while the end-result of the claimed method may result in gray-scale images,[2] this does not mean those images were acquired in the same way as those disclosed by *Hochman*. Applicant is not claiming gray-scale images, but rather, a particular method that may, in some cases, lead to the generation of information presented as a gray-scale. Selected steps of the claimed method, and the distinction between those steps and the teaching of *Hochman*, are discussed in detail below.

#### "Scanning a series of points"

In rejecting claim 59, the Examiner states that the limitation of "scanning a series of points" is disclosed by *Hochman* at column 10, lines 13-16, which reads as follows:

> "Electromagnetic Radiation (emr) means energy having a wavelength of from about 450 to about 2500 nm. Emr illumination suitable for use with the optical detection techniques described herein is in the visible and infrared regions."

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[1] *Hochman*, U.S. Patent No. 6,671,540.
[2] Which it need not, as recited in claims 60 and 61.

The cited text merely defines what is meant by electromagnetic radiation in the context of the *Hochman* application. It does so by defining a range of wavelengths between 450 nm and 2500 nm.

The cited text plainly has nothing to do with "scanning a series of points."

**"Processing the detected radiation"**

In rejecting claim 59, the Examiner states that the limitation of "processing the detected radiation to generate a set of numbers wherein each number in the set characterizes a different point of scanned tissue" is disclosed by *Hochman* at column 1, lines 27-33, which states:

> "More specifically, the methods and apparatus of the present invention relate to the use of contrast enhancing agents in connection with optical spectroscopic techniques to distinguish abnormal or pathological tissue, such as cancerous tissue, from normal tissue and to grade and characterize cancerous tissue."

The above text merely states that the disclosed invention involves using contrast enhancement agents and optical spectroscopy to detect and classify cancerous tissue.

The cited text discloses little more than the broad purpose and general outline of the *Hochman* invention. It says nothing about "processing the detected radiation to generate a set of numbers wherein each number in the set characterizes a different point of scanned tissue."

**"Converting the set of numbers into a continuous grade output"**

In rejecting claim 59, the Examiner states that the limitation of "converting the set of numbers into a continuous grade output that characterizes the tissue without a threshold" is disclosed by *Hochman* at column 8, lines 20-35:

> Control data may represent standards derived from optical properties of empirical data samples of desired tissue populations. Control data may thus be derived representing various normal tissue types as well as various abnormal tissue types, such as different types and grades of tumors. Comparison of data acquired following administration of a contrast enhancing agent to various types of control data may then provide identification and spatial localization of abnormal tissue, such as cancer, as well as typing of the abnormal tissue, such as identifying particular cancers, and grading of cancerous tissue. For abnormalities such as cancer, it may be desirable to compare multiple data sets acquired at intervals following administration of the contrast enhancing agent to control data to observe changes in the optical properties of tissue at the area of interest at predetermined time intervals following administration of the contrast enhancing agent.

The above text describes how one would obtain control data. It also states that one can compare acquired data with control data to learn whether particular tissue is abnormal. This has nothing to do with converting numbers into a continuous grade output.

In rejecting claim 59, the Examiner further states that the limitation of "converting the set of numbers into a continuous grade output that characterizes the tissue without a threshold" is disclosed in claim 33:

> "33. A method for in situ grading and characterizing a cancerous tissue in a patient, comprising:
>
> positioning one or more illumination source and detector arrays in contact with the patient;
>
> illuminating an area of interest lying under an exterior surface with the illumination source array(s) emitting electromagnetic radiation (emu [sic]) having at least one wavelength which interacts with a contrast enhancing agent;
>
> administering the contrast enhancing agent to the patient;
>
> detecting one or more optical properties of spatially identifiable areas within the area of interest with the detector array(s) subsequent to administration of the contrast enhancing agent; and
>
> comparing the optical properties of the spatially identifiable areas within the area of interest subsequent to administration of the contrast enhancing agent to either one of corresponding optical properties of different spatially resolved areas of the area of interest or a control data set representing a corresponding one or more optical properties of tissue of different spatial areas identified by type and/or condition, whereby differences in the optical properties are characteristic of cancerous tissue having different grades and characters."

The first two steps of claim 33 essentially recite positioning a light and turning it on. The next step recites administering a contrast enhancement agent. The last two steps essentially recite comparing what you see at a particular location with what you would see for control tissue. None of these steps refer to converting a "set of numbers" into a "continuous grade output."

The Examiner may have been misled by the last step of claim 33, which refers to "cancerous tissue having different *grades*." As disclosed by *Hochman*, tumors are classified, or "graded" according to their malignancy. The use of "grade" in claim 33 thus refers to classification of tissue. It has nothing to do with "continuous grade output" as recited in the claim.

**DEPENDENT CLAIMS**

Claims 60-63 all depend on claim 59 and are therefore patentable for at least the same reasons set forth in connection with claim 59.

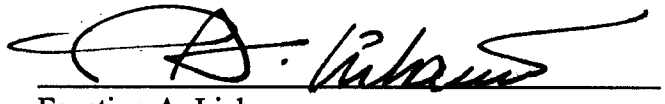
**SUMMARY**

That Applicant has advanced only selected grounds for patentability is not to be interpreted as meaning that no other grounds for patentability exist.

Now pending in this application are claims 59-63, of which claim 59 is independent. No additional fee is believed to be due in connection with the filing of this response. However, to the extent fees are due, or if a refund is forthcoming, please adjust our deposit account 06-1050 referencing attorney docket "12258-030001."

Respectfully submitted,

Date: May 19, 2006



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